2005 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons

27 May 2005

Original: English

New York, 2-27 May 2005

Message from the Executive Secretary of the Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization, Ambassador Wolfgang Hoffman, to the 2005 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons

1. The objective of the Comprehensive Nuclear-Test-Ban Treaty (CTBT) is to secure an end to all nuclear-weapons testing and other forms of nuclear explosions. The CTBT, by putting an end to all nuclear explosions, constitutes an effective measure of nuclear disarmament and non-proliferation in all its aspects, and therefore contributes to the enhancement of international peace and security. The CTBT could also contribute to the protection of the environment. The CTBT, together with the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) and the still-to-be-negotiated fissile material cut-off treaty forum, are complementary issues of international non-proliferation and disarmament. These mutually reinforcing treaties form the legal basis for the realization of the shared objective of ridding the world of nuclear weapons.

2. The terrorist attacks of 11 September 2001 in New York and Washington, D.C., and of March 2004 in Madrid have demonstrated the will of terrorist groups to inflict indiscriminate and massive destruction. The nightmare of nuclear weapons in the hands of such groups defies imagination. To avoid such catastrophes, the international regime of nuclear non-proliferation and disarmament needs to be strengthened and fully complied with.

3. The main activities of the Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO) established on 19 November 1996 and its Provisional Technical Secretariat, which started work at the Vienna International Centre on 17 March 1997, have been the establishment of the verification regime stipulated by the CTBT and the promotion of understanding and entry into force of the Treaty.

4. Since the 2000 Review Conference and during the period of the preparatory process for the 2005 Review Conference, significant progress has been made in establishing the verification regime to verify compliance with the CTBT, as well as in advancing signature and ratification.

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5. Since its adoption in 1996, the CTBT has received significant support from the international community. To date, the Treaty has been signed by 175 States and ratified by 121 States, including 33 of the 44 States listed in annex 2 to the CTBT whose ratification is required for entry into force. A remarkable increase of 89 signatures and ratifications has been observed since the 2000 Review Conference.

6. In accordance with a Treaty provision, three Conferences on facilitating the entry into force of the CTBT (Article XIV Conferences) of States that have ratified the Treaty were held in 1999, 2001 and 2003 to "examine measures consistent with international law" that "may be undertaken to accelerate the ratification process in order to facilitate the early entry into force" of the CTBT. In accordance with the "Final Declaration and Measures to Promote the Entry into Force of the Comprehensive Nuclear-Test-Ban Treaty" of the 2003 Article XIV Conference, a special representative, Jaap Ramaker of the Netherlands, has been assisting the coordinating State in promoting the entry into force of the CTBT. The special representative has been concentrating his activities on some of the 11 States listed in annex 2 to the CTBT that have yet to sign and/or ratify the CTBT, in coordination with efforts of the Executive Secretary of the Preparatory Commission. The next Article XIV Conference will be convened in New York, from 22 to 24 September 2005, under the presidency of Australia.

7. The 2004 Joint Ministerial Statement on the CTBT, initiated by Australia, Finland, Japan and the Netherlands and adopted on 23 September 2004, is further evidence of the interest of States in bringing about the entry into force of the CTBT and in reinforcing the concrete measures to promote signature and ratification of the Treaty that were agreed by the 2003 Article XIV Conference and are being pursued in the Conference follow-up process.

8. Verification is a key component of nuclear non-proliferation and disarmament. Independent and impartial verification regimes instil confidence in the efficiency of our treaties and provide an objective basis for actions of the international community in cases of non-compliance.

9. The CTBT global verification regime, which needs to be operational at the entry into force of the Treaty, to monitor compliance with the CTBT provisions, consists of four elements:

(a) The International Monitoring System (IMS), and respective means of communication supported by the International Data Centre (IDC), which will be able to detect evidence of possible nuclear explosions;

(b) A consultation and clarification process, which can clarify and resolve matters concerning possible non-compliance with the CTBT;

(c) The conduct of on-site inspection, in order to clarify whether a nuclear-weapon-test explosion or any other nuclear explosion has been carried out in violation of the Treaty, and the gathering of facts, which might assist in identifying potential violators;

(d) Confidence-building measures, which will contribute to resolving compliance concerns arising from possible misinterpretation of verification data and will thereby assist in the calibration of IMS stations.

10. The progressive shift in the establishment of the verification regime from a build-up phase to provisional operation and maintenance of the monitoring system represents a substantial development. The establishment of the 321 seismic, radionuclide, hydroacoustic and infrasound monitoring stations and 16 radionuclide laboratories of the IMS network is steadily and securely progressing. At the end of March 2005, there were 205 stations that were either certified or installed or that substantially met specifications. Of those, 165 send data to the IDC. An additional 72 stations are under construction or under contract negotiation. The testing and evaluation phase of the monitoring system shows that the network can be completed within the next three to four years. In order to provide the legal framework necessary to conduct IMS work, the Commission concluded, as of 31 March 2005, facility agreements/arrangements with 32 States covering 325 stations.

11. The IMS stations are transmitting raw data to the IDC in Vienna through a satellite-based global communication infrastructure (GCI), which also connects the IDC with national data centres of States. From the IDC both data and resulting analysis bulletins are distributed to national data centres. To date, 84 States have established national data centres.

12. On-site inspections (OSIs), as provided for in the Treaty, are final verification measures, which would only be conducted once the CTBT had entered into force. The main task of the Commission in this area is to establish the OSI regime, including the capability to conduct on-site inspections after entry into force. The major elements of the OSI regime are inspectors, equipment and the OSI operational manual.

13. The primary purpose of the CTBT is to globally ensure an end to nuclear-test explosions, thus enhancing national and international security. However, the CTBT verification technologies have the potential to offer important additional benefits derived from the IMS data and the activities of the IDC. The IMS radionuclide network offers opportunities for detecting radionuclide dispersion, monitoring radiation levels and studying natural radioactivity, biological research and environmental change investigations. Seismic, hydroacoustic and infrasound data can be used in studies on the structure of the Earth and for research on earthquakes, atmospheric and meteorological studies, volcanic eruption forecasting, underwater explosion location, sea temperature and climate change monitoring, as well as tsunami warning.

14. Following the devastation caused by the tsunami of 26 December 2004 in the Indian Ocean, the Preparatory Commission held a special session, on 4 March 2005, to consider a possible contribution of the CTBTO Preparatory Commission to a tsunami warning system. Building upon current technical capabilities and options for future adaptations thereof, the special session crafted a balanced approach to the role the Commission should play as part of global efforts to develop tsunami alert systems. The Provisional Technical Secretariat is currently cooperating with the Pacific Tsunami Warning Centre and the Japan Meteorological Agency through the United Nations Educational, Scientific and Cultural Organization to explore and test ways and means to contribute to the establishment of a tsunami alert system in the Indian Ocean.

15. The Preparatory Commission offers training programmes and workshops to support the enhancement of national capabilities of its Member States in the implementation of the CTBT. These include training courses for IMS station

operators, NDC managers and technical staff, on data analysis, storage and management, the global communications infrastructure and OSI technologies. In the field of international cooperation, the Provisional Technical Secretariat continues its role as an information clearing house and provides support for the advancement of the work of the Commission, including information on programmes and national seminars to support IMS and IDC activities. Voluntary contributions from the Czech Republic, Finland, Japan, the Netherlands and Norway have been received to support these activities. During the five-year period 2000-2004, the Preparatory Commission has been able to support as many as 92 training programmes, workshops and seminars in various parts of the world and has sponsored participants from 166 countries.

16. Following the adoption by the General Assembly on 15 June 2000 of the Agreement to regulate the relationship between the United Nations and the Preparatory Commission for the CTBTO, our relations and interactions with the United Nations and its programmes, funds and specialized agencies have intensified. The Preparatory Commission has a relationship and cooperation agreements with the United Nations, the United Nations Development Programme, the World Meteorological Organization, as well as with the Agency for the Prohibition of Nuclear Weapons in Latin America and the Caribbean, the Association of Caribbean States and the European Centre for Medium-Range Weather Forecasts.

17. The CTBT was assigned a special role in the United Nations Millennium Declaration, in the section on peace, security and disarmament, and was listed, for signature or ratification, on the occasion of the Millennium Summit by the Secretary-General among 25 core multilateral treaties representing the key objectives of the United Nations. The Preparatory Commission supports States in the implementation of the relevant provisions of the Millennium Declaration. The high-level review of the Millennium Summit, scheduled to be held from 14 to 16 September 2005, would provide an opportunity to consider further actions in this respect.

18. The CTBT, although signed and ratified by a significant majority of States and recognized as an important international legal instrument in the field of nuclear disarmament and non-proliferation, has yet to enter into force. The Final Document of the 2000 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, underlined, inter alia, "The importance and urgency of signatures and ratifications, without delay and without conditions and in accordance with constitutional processes, to achieve the early entry into force of the Comprehensive Nuclear-Test-Ban Treaty".